ISSN (print): 2548-8619; ISSN (online): 2548-8600

Volume 7 Number 2; DOI: http://dx.doi.org/10.17977/um005v7i22023p359

# The Result Soft and Hard Skills Assessment on Vocational Skills of Children with Mild Intellectual Disabilities at The Liwet Instant Company 1001 Garut

# Mughi Puspa Annisi, Imas Diana Aprilia, Oom Sitti Homdijah

Universitas Pendidikan Indonesia, Bandung, Indonesia

E-mail: mughipuspa@upi.edu

Abstract: In preparing graduate children with mild intelligence barriers who are ready to work, of course, it requires an initial description of the child's condition in vocational skills in the aspects of soft skills and hard skills according to the demands of the world of work that are targeted, teachers can do this through an assessment process. This research method uses the mixed method method. The purpose of this study was to determine the child's profile, including a description of the child's potential, barriers and needs. The results of this study included child profile data which were processed using quantitative data and qualitative data on 5 aspects of soft skills, 2 basic development and 7 aspects of hard skills. The results of the assessment showed that there were aspects of soft skills that still needed to be optimized in interpersonal behavior with a score of 56%, while in the hard skills aspect there were aspects of milled rice processing with a score of 55% which still needed to be optimized as well as skills, especially skills in weighing rice. The results of this assessment were used as the basis for creating a work readiness vocational program at the Garut 1001 Instant Liwet Rice Company.

Keywords: assessment, soft skills, hard skills, skills, vocational

#### INTRODUCTION

Vocational education is an educational service provided to children with mild intellectual disability/ADHK so that children can have a skill or expertise that is of course in accordance with the interests and talents of the child itself. The implementation of vocational education in Special Schools/SLB is of course based on a curriculum that can be used as a reference. Wahyuni (2018) explained, that the curriculum related to vocational and independence programs for children with special needs/ABK is a top priority which is compiled in a ratio of 40% academic and 60% vocational. Learning life and work skills is important for ABK, so the portion is bigger. Through vocational education, it is one of the school's efforts in preparing mild ADHK to eventually be able to be financially independent through the skills or expertise they have, either by opening a business independently or being able to work in a company. This is also in line with Wahyuni's statement (2018), that is, with a larger vocational portion compared to academic, it is intended that after finishing school, these skills can be used to work and live independently. However, many facts on the ground indicate that there are vocational programs that are not based on the child's condition, so that not a few program implementations are unsuccessful due to a lack of assessment that is not appropriate for the child's condition (Tordin & Tahar, 2021; Rosyidi et al, 2022).

In preparing children with mild intelligence barriers to enter the world of work, of course there are many things that need to be trained for children so that children are ready to work. Described by Stevani 2015 (in Fitriah, et al 2021), work readiness is the overall condition of the physical, mental and experience as well as the willingness and ability to carry out work or an activity. This explanation emphasizes that work readiness includes all individual condition readiness, so that it is not only hard skills that must be mastered by children, but also soft skills which in turn lead to children's social skills which are of

course a provision for children in the world of work. However, in providing vocational education services, schools usually only have programs that focus on children's hard skills in both cooking, fashion, housekeeping, and others. So that there is an imbalance between the training of hard skills and soft skills which are equally important modalities for children to enter the world of work. To balance the hard skills and soft skills of children with mild intelligence barriers, the teacher's first step is to gather information and understand the problems, abilities and needs of children in each of these aspects which will later become the basis of work readiness programs for children.

In the world of the 1001 instant liwet rice company, of course, workers have various fields of expertise that must be mastered. However, the hard skills that have a high chance of being followed by children with mild intelligence barriers are in the skills section for packaging instant liwet rice 1001, which consists of (1). Dress according to SOP, (2). Personal hygiene according to SOP, (3). Processing of milled rice, (4). Packaging of rice in boxes, (5). Packaging of rice in sachet packaging, (6). Use of vacuum condiments and spices, (7). Distribution of large boxes. These hard skills were obtained from data from interviews conducted with the company, then the results of these interviews were developed into an assessment instrument, to dig up information on potential conditions, barriers, and learning needs of children on work readiness hard skills skills that must be owned according to company demands the. Whereas in the aspect of soft skills that must be mastered by Children with Intelligence Barriers as a modality in the world of work is based on the explanation of Khoeriah, et al (2019), which includes skills, (1). Interpersonal behavior, (2). Intrapersonal Behavior, (3). Behavior related to academic success, (4). Peer acceptance, (5). Apart from that, there are basic developments which are the working modalities of Children with Special Needs that we need to consider, namely (1). Motor development, (2). Perception Development. This is in line with Hakim's explanation (2016), that by having good motor skills a person certainly has the basis for mastering specific motor skill tasks. In obtaining various information in the world of work, of course, children need perceptive skill modalities. Supported explanation by Ayres 1979 (in Komariah, 2018), through the five senses, humans obtain information about the physical conditions and the environment around them. Sensory information received will enter the brain not only through the eyes, ears, and nose but through the whole body. Then from these sources, assessors develop in an instrument that includes the ability of motor development and perception.

Gathering information regarding mild ADHK conditions is carried out through an identification and assessment process. This identification and assessment process is carried out before the learning process takes place. It begins with an identification process that we can do through interviews with subjects or sources closest to our target subject (Nadiyah, 2022). The data obtained from the identification results are used to determine skills in soft skills, hard skills and which aspects of development will be followed up in the assessment process. The assessment process for exploring the conditions of work readiness in the aspects of soft skills, hard skills and developmental aspects is carried out using performance techniques or practical tests. Explained by Wulan (2018), the performance assessment process that is assessed is related to the competency skills that must be mastered by children, so that what is assessed is students when doing something (process) or the result (product). The assessment criteria in the assessment process, when viewed from the final score that is less than the assessment criteria, means that these aspects have not been mastered by the child optimally and need to be given further training. This is in line with Dewi's explanation (2018), namely that assessment is an assessment process that is carried out before the learning process takes place, even before the learning program is

designed. The assessment is also a follow-up to the Identification stage, through a systematic or regular and comprehensive assessment process in exploring further problems to find out the child's condition. There are 3 most basic things in the profile of children with special needs, namely the conditions as a result of the assessment process, namely an overview of the child's potential condition, the condition of the child's obstacles and the condition of the needs needed by the child. The results of the assessment process can be used as basic material in making programs based on the potential conditions, obstacles and needs of children, so that children with mild intellectual disabilities can obtain vocational education programs that are able to balance hard skills and soft skills as modalities in the form of child readiness in nasi liwet companies instant 1001.

# **METHOD**

The method used in this study is a mixed method (Mixed Method). Explained by Cressweel (2015) mixed method is a type of method that collects, analyzes and combines quantitative and qualitative research methods in a research series to understand the researcher's problems. Researchers use data, with data sources derived from qualitative and quantitative methods and then combine them into complete and interrelated data.

In this study, the qualitative data sources are sources obtained by data collection techniques through observation, documentation and interviews, concerning the condition of children in the aspects of soft skills related to children's social skills, and conditions of motor development and children's perceptions as supporting data for the basis of making program. While the quantitative sources in this study are data sources obtained from the results of practical tests on children's abilities in the aspect of hard skills in the world of work packaging instant product 1001 rice. qualitative data by describing each of each score obtained by the child. The research sample used in this study was children with mild intellectual disabilities who were already at the SMALB level.

The instrument used in this study was the development of an assessment instrument that included collecting data on aspects of soft skills, hard skills and motor development and children's perceptions. Instruments for extracting aspects of soft skills and aspects of development are made in the form of interview instruments aimed at class teachers who know the condition of children's abilities objectively, while instruments for extracting data on children's hard skills are made in the form of task analysis or as sequence points in carrying out each of these hard skills skills that must be mastered by the child properly. For making instruments for children's soft skill aspects based on Khoeriah, et al (2019), regarding the scope of work readiness aspects in social skills which are the capital of children with mild intelligence barriers in preparing for the distribution of soft skill aspects. consists of, (1). Interpersonal behavior, (2). Intrapersonal Behavior, (3). Behavior related to academic success, (4). Peer acceptance, (5). Communication skills. While the instrument on hard skills includes 7 points in the process of packaging instant liwet rice products 1001 consisting of (1). Dress according to SOP, (2). Personal hygiene, (3). Processing of milled rice, (4). Packaging of rice in boxes, (5). Packaging of rice in sachet packaging, (6). Use of vacuum condiments and spices, (7). Packaging of boxes. Distribution and for aspects of basic development that are important to consider as modalities of child work readiness which include (1). Motoric abilities, (2). Perceptual abilities that also support the work readiness of children with mild intelligence barriers. This is in line with the demands of work that must be mastered by children at the 1001 instant liwet rice company.

The procedure for carrying out the assessment, first is to collect data on the soft skill abilities and basic development of the child by conducting in-depth interviews with the class teacher who is considered the person who knows the child best, from the subject by

exploring 5 sub-aspects of soft skills and 2 aspects of development that have been determined in instrument. The second stage is to carry out the assessment process on the hard skill aspect with a practical test technique with a period of 3 meetings taking into account the number of hard skills that must be explored. The sequence of hard skills that is assessed is based on the order that has been arranged on the instrument. This assessment process, of course, in its implementation involves the company providing tutors in carrying out each hard skill skill, then the child is given one opportunity to do it, and the assessor immediately conducts the assessment. The third stage is data processing by analyzing data with descriptive statistical analysis. It is explained quantitatively in the form of percentage data and qualitatively in the form of a description of the child's condition which includes aspects of the child's abilities, the child's disability and the child's needs. The final stage is presenting data quantitatively and qualitatively.

The data analysis technique used in this study is qualitative analysis using triangulation as proposed by Miles and Hubberman (Sugiyono, 2017) namely data collection, data reduction, data presentation and the last step is drawing conclusions. While the quantitative data analysis technique used is data processing in the form of percentages.

## FINDING AND DISCUSSION

#### Finding (s)

From the results of the assessment process carried out on the subject in exploring the child's profile data which describes the child's condition in the vocational skills aspects of soft skills, hard skills and aspects of motor development and children's perceptions. Acquisition of assessment data that is processed quantitatively in Figure 1, 2, and 3.

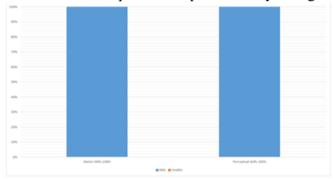


Figure 1. Assessment Result of Developmental Aspect

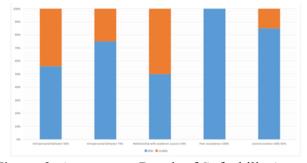


Figure 2. Assessment Result of Soft skills Aspect

Figure 3. Assessment Result of Hard Skills Aspect

Through the established criteria, namely:

76% - 100%: The child's ability to work is good 50% - 75%: The child's ability to work is quite good 0% - 45%: The child's ability to work is not good

When viewed from the acquisition of quantitative data assessment results on vocational skills in the soft skill aspect, there are 5 aspects, namely showing good intrapersonal abilities, good peer acceptance skills, and good communication skills. However, there are aspects of soft skills that need to be optimized, namely in the aspect of interpersonal behaviour or behaviour related to other people with a score of 56%. Even though the score obtained is still quite good, the score obtained is a low score. In addition, the aspect that needs to be optimized again is the aspect of academic ability which gets a score of 50%, which means that the child's ability to work is not good. So that there are 2 aspects of soft skills that still require optimization in improving their skills. Finally, the assessor with the class teacher determines through a priority scale for aspects that really have an urgency value according to the demands of the company, so that from the aspect of interpersonal behaviour skills and relationship skills and academic success, that is used as the basis for making the first program in soft skill skills, namely in the behavioural skill aspect interpersonal. This is based on the existence of company regulations in accordance with the SOP, namely employees must behave properly. The child's profile data regarding the description of the child's soft skills in the aspect of interpersonal behaviour is as follows:

The ability of children's soft skills towards themselves becomes a child's modality in the world of work, as explained by Manara (2014), soft skills are characteristic abilities possessed by individuals in responding to their environment. Soft skills are needed by workers who are not related to technical knowledge, for example the ability to interact with others and adaptability.

For the acquisition of assessment results on the hard skill aspect, the subject showed that the child's ability to work was good in the aspect of appearance, behavior according to SOP, packaging in boxes and sachets. As for the child's ability to work quite well, it is shown in the aspect of maintaining personal hygiene, vacuuming herbs and spices, packing boxes for distribution and processing of milled rice. Of the 7 aspects, there is an aspect that gets the smallest score, namely the aspect of milled rice processing. The process of processing milled rice is of course divided into several stages, namely sorting the rice, placing the rice in plastic with using a scope, and weighing rice for 250 and 500 gram packages. For the smallest score obtained by the subject in processing this milled rice in the rice weighing process, which is equal to 44%. Child profile data in the aspect of hard skills which focuses on the process of weighing rice are as follows:

Table 1. Soft Skills Assessment Result

Potential Aspect	Obstacle Aspect	Children's Learning Needs
Children can accept leadership	Children are not yet able to pay	1. Learning that trains children's
<ol> <li>Children can respect other</li> </ol>	attention	soft skill aspects of
people	1. Children are not yet able to	behavioural skills in giving
2. Children can carry out	be friendly toother people	attention to others
independent tasks from a	and the environment always	2. Learning soft skills that train
leader	gives a smile	children in the skills to start a
3. Children can carry out tasks	2. Children are not yet able to	conversation
in groups according to the	show empathy to other	3. Learning soft skills in
leader's orders	people and their environment	coaching Skills children in
Children can overcome conflict	3. Children have not been able	filtering information as a
1. Children can overcome	to show sympathy for other	form privacy or not.
challenges by trying to find	people and the environment	
solutions	4. Children are not yet able to	
Children can get along with	be respectful other people	
friends	Children are not yet able to start a	
<ol> <li>Children can open</li> </ol>	conversation	
friendships or friendships	Children are not yet able to	
2. Children can place	respect privacy	
themselves / participate in a	1. Children are not yet able to	
group.	choose what should and	
	should not be communicated	
	toother people	

Table 2. Hard Skills Assessment Result

Child Potential	Obstacle. Child	Children's Learning Needs
1. The child can recognize the name of the scales	1. Children are not yet able to 1. use digital scales (because	Learning in training how to use a digital scale
	they do not know how to use 2. them)	Practice in knowing the number 250
	2. Children are not yet able to 3. distinguish the numbers on the scales	-
	3. The child is not yet able to distinguish under the scale that weighs less or more than 250 grams	

The data from the assessment on the hard skill aspect is of course an important initial data for compiling what program will be given to the subject by focusing on one of the aspects that is an urgency in optimizing their skills which is of course a subject modality in the world of work. This is in line with the definition of hard skills according to the Random House Dictionary Robes 2012 (In Manara 2014), namely abilities that come from knowledge, practical ability, or intelligence to do something well, competence in doing something, expertise or skills that require certain training. Hard skills which are also often called technical abilities are needed by workers in order to carry out a series of basic tasks to achieve work goals. As for the condition of the basic development of children in the motor aspect which includes gross and fine motor skills and the child's perceptual abilities which include tactile perception, visual, olfactory perception and memory are very good, it can be seen from the maximum score obtained by the child which is 100%.

## Disscusion

From the acquisition of the assessment results above, the assessor has an idea of which aspects the child has mastered, which aspects still need to be optimized in honing

their skills both in the soft skill and hard skill aspects through the program that will be given as an effort to prepare the child's modalities in working world. This is in line with the explanation of assessment according to Siswiyanti & Astuti (2022), namely assessment is the process of collecting evidence data and examining the needs, advantages, abilities and descriptions of children's developmental and learning achievements in their activities. In addition, explained by Hastuti, et al (2022), assessment in education functions as a source of information on student development in achieving certain predetermined indicators. So that the results of the assessment that refer to the child's profile data can become the underlying data in the provision of work readiness vocational programs on the soft skill and hard skill aspects to the subject in accordance with the demands of the 1001 Nasi Liwet Instant Company regulations. Through the assessment process is also the first step for creating a vocational program that is able to balance children's work modalities in the aspects of soft skills and hard skills.

In compiling a vocational program we need dimensions that we need to consider, explained by Finch & McGough 1982 (in Almarogi 2019), (1). The human dimension, which includes human relations, creativity, commitment, flexibility and long-term orientation, (2). Task dimension, which includes planning, development, management and assessment sections, (3). The environmental dimension, which includes the school environment, community and labor supply. Through the assessment process with the acquisition of the data above, we have carried out one part of the planning process in preparing vocational programs for children, through data collected regarding exploring the conditions of child development, soft skill skills and hard skills including the human dimension data which focuses more on exploring children's soft skills abilities both interpersonally and intrapersonally, while the assessment process carried out includes fulfilling the dimensions of the task in which we carry out an assessment of the child's initial condition. So that through this assessment process, it is possible to develop a vocational program that is effective and in accordance with the child's condition, and with a vocational program that considers various dimensions, it is able to prepare a workforce of Children with Mild Barriers in accordance with the demands of the world of work as a form of fulfilling community needs. In addition, the assessment process is also part of the strategy as a supporting factor for the vocational program, in line with Almarogi's explanation (2019), that the supporting factors in fostering entrepreneurial or occupational values in children with mild intelligence barriers include reforming the curriculum starting with the assessment process, then continuing with the use of the PPI program to help achieve vocational development goals, the third stage is implementing pre-vocational education, and the fourth stage is implementing a vocational program. This explanation clearly illustrates the importance of the assessment process in creating an effective and appropriate vocational program.

## **CONCLUSSION**

Through an assessment process carried out using interview techniques, direct observation and practical tests, the teacher can collect initial data on the child's condition which describes how the child's potential condition is described, what the child's condition is like, and what the child's learning needs are. Data from the results of the assessment obtained, namely, the child's ability that still needs to be optimized in the soft skill aspect of interpersonal behavior skills and the program on hard skill job readiness leads to the child's ability in the process of weighing rice. Through this description, it becomes the data that underlies teachers in providing work readiness programs for Children with Mild Intelligence Barriers at the Nasi Liwet Instant 1001 Garut company and this is in line with

Rahmawati's explanation (2019), and Talago & Pratiwi 2018 (in Hastuti, et al 2022), and Primanisa & Zagriani (2020), namely the assessment process as a process of gathering comprehensive and accurate information using the appropriate tools and techniques. Then one of the functions of the assessment is to provide information to educators to plan and decide on strategies or approaches for further learning processes or as material for consideration in conducting interventions through educational programs and services that are oriented to the needs and characteristics of children.

#### REFERENCES

- Almarogi, A. M. (2019). Implementasi Program Pendidikan Vokasional Sebagai Investasi Bagi Anak Tunagrahita dalam Setting Pendidikan Khusus. *INCLUSIVE: Journal of Special Education*, 5(1). https://doi.org/10.30999/jse.v5i1.895
- Creswell, J. W. (2015). Revisiting mixed methods and advancing scientific practices.
- Dewi, D. P. (2018). Asesmen Sebagai Upaya Tindak Lanjut Kegiatan Identifikasi Terhadap Anak Berkebutuhan Khusus. [Assessment as a follow-up to the identification of children with special needs.] *Wahana*, 70(1), 17-24. https://doi.org/10.36456/wahana.v70i1.1563
- Fitriah, H., Darmawan, D., & Faturohman, N. (2021). Hubungan Kecakapan Vokasional Khusus Dengan Kesiapan Kerja Peserta Pelatihan Tata Boga. [Relationship Between Specialised Vocational Skills and Work Readiness of Catering Trainees] *Jurnal Eksistensi Pendidikan Luar Sekolah (E-Plus)*, 6(1). http://dx.doi.org/10.30870/e-plus.v6i1.11425
- Fitriah, S. (2021). Children with Special Needs in the Eyes of Islamic Law and the State. *AKADEMIK: Jurnal Mahasiswa Humanis*, 1(2), 77-86. https://doi.org/10.37481/jmh.v1i2.231
- Hakim, A. R. (2016). Pengaruh Motorik Kasar Anak Tunagrahita Terhadap Motorik Halus [The Influence of Gross Motor Skills of Tunagrahita Children on Fine Motor Skills]. *Jurnal Ilmiah Penjas (Penelitian, Pendidikan dan Pengajaran)*, 2(2).
- Hastuti, I. B., Asmawulan, T., & Fitriyah, Q. F. (2022). Asesmen PAUD Berdasar Konsep Merdeka Belajar Merdeka Bermain di PAUD Inklusi Saymara [ECD Assessment Based on the Concept of Free Learning Free Play at Saymara Inclusive ECD Centre]. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(6), 6651-6660.
- Khoeriah, N. D., Nuraeni, N., & Lestari, Z. W. Program Life Skills Keterampilan Kerja Bagi Penyandang Tunagrahita Ringan. [Life skills programme for people with mild impairmen]
- Komariah, F. (2018). Program Terapi Sensori Integrasi bagi Anak Tunagrahita di Yayasan Miftahul Qulub [Sensory Integration Therapy Programme for Children with Disabilities at Miftahul Qulub Foundation]. *INKLUSI*, 5(1), 45-72. https://doi.org/10.14421/ijds.050103
- Manara, M. U. (2014). Hard skills dan soft skills pada bagian sumber daya manusia di organisasi industri. *Jurnal Psikologi Tabularasa*, 9(1). https://doi.org/10.26905/jpt.v9i1.231
- Nadiyah, S., Susetyo, B., Tarsidi, I., Novianti, R., Ediyanto, E., Susilawati, S. Y., & Santoso, Y. B. (2022). Development of Identification Instruments for Children with Specific Learning Disability in Elementary School. *Journal of ICSAR*, 6(1), 116-124.
- Primanisa, R., & Jf, N. Z. (2020). Tindak Lanjut Hasil Asesmen Terhadap Pelaksanaan Pembelajaran Anak Usia Dini di Taman Kanak-Kanak (TK) [Follow-up of Assessment Results on Early Childhood Learning Implementation in Kindergarten (TK)]. *Jurnal Pendidikan Raudhatul Athfal*, 3(1).
- Rahmawan, D. I. (2020, July). Analisis Asesmen Pendidikan Inklusi untuk Anak Berkebutuhan Khusus. [Analysis of Inclusive Education Assessments for Children with Special Needs] In *the Indonesian Conference on Disability Studies and Inclusive Education* (Vol. 1, pp. 47-62).
- Rahmawati, R., Lestari, F., & Umam, R. (2019). Analysis of the effectiveness of learning in the use of learning modules against student learning outcomes. *Desimal: Jurnal Matematika*, 2(3), 233-240
- Rosyidi, R. A., Junaidi, A. R., & Sunandar, A. (2022). Implementation of Vocational Skills Program for Intellectual Disabilities: Evaluation Study with CIPP (Context, Input, Process, Product). *Journal of ICSAR*, 6(1), 83-92. <a href="http://dx.doi.org/10.17977/um005v6i12022p083">http://dx.doi.org/10.17977/um005v6i12022p083</a>
- Siswiyanti, S., & Astuti, H. P. (2022). Learning Assessment for Children with Special Needs in Inclusive Early Childhood Education. *BELIA: Early Childhood Education Papers*, 11(1), 42-50.
- Sugiyono. 2011. Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta

- Tordin, M. F., & Tahar, M. M. (2021). Implementation of Career Transition Programme in Vocational Skills for Students with Learning Disabilities. *Journal of ICSAR*, 5(2), 3-7.
- Wahyuni, N. (2018). The Role of Vocational Education for Children with Special Needs in Facing the Challenges of the Age. Family Journal. 4(2).139-146
- Wulan, R,A.(2018). Using Performance Assessment for Science and Research Learning. Bandung: UPI Press